

From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996
From: Stan Skelton <sskelton@c1n.etc.bc.ca>
Subject: [8620] "WCN" net??
Message-ID: <Pine.3.89.9605160852.A27772-0100000@sparky>

I just tuned in on the tail end of the description of a net last night at 0200 UTC, they were saying it was a "training" net (if my code didn't fail me) and were around 3.697 (+-)...Anyone with any info on this net? TtFn....Stan T.M. VE7 SKT QRP-L #34 SPRITE 80M

From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996
From: km@PACT.ORG.PE ()
Subject: [8645] 30 meter gray line -- Transequatorial
Message-ID: <m0uKEMM-000WakC@rcp.net.pe>

Been following the thread. True doen this way for trans equatorial work, e.g., SM3OKC was loud down here about 23:00 UTC tonight. I followed him up and down the lower part of the band - he was calling his heart out, but not receiving my signal. Then he crashed about 45 minutes after sun set.

That's all, I'm heading for the key again,

73,

Kris
OA4DB0

From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996
From: w3fpr@nando.net (D B Wilhelm)
Subject: [8635] 40-9er mods question
Message-ID: <9605161821.AA02151@nando.net.nando.net>

Gang, I know there have been quite a few mods for the 40-9er, but has anyone compiled them in a place for easy download? If so, please let me know. Otherwise, I will have to dig through the archives. Maybe a list of the archives that cover the mods would be helpful.

Also I'm waiting to hear how progress is going on the transmit freq shift mod. Anyone have a good solution to this one?

72 es tn timer,
Don W3FPR

From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996
From: bob.roach@sourcebbs.com (BOB ROACH)
Subject: [8629] 80M Antenna ??????????
Message-ID: <8C0B306.00010385E8.uuout@sourcebbs.com>

Hello All,

I do some camping with a popup tent trailer and would like to be able to set up some kind of reasonably effective 80M antenna when I am camping. The main considerations are effectiveness (of course), ease of erection and removal, usable in a crowded campground, and inexpensive.

This will be strictly a QRP antenna and will not have to handle more than 5 Watts tops.

Any hints or suggestions will be greatly appreciated.

TNX de KE4QOK
Bob

* SLMR 2.1a * Veni, Vidi, Antennabildi..I came, I saw, I put up antenna

This message originated from: ----- Selective Source BBS
----- Virginia Beach, Virginia
----- (804) 471 6776

From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996
From: cmassey@airmail.net (Cleve Massey)
Subject: [8607] DAYTON NEWS
Message-ID: <v02140b00adc1af942c99@[204.178.75.44]>

I trust that those of you who are lucky enough to get to Dayton and participate in the terrific QRP activities will be posting bits of news and cool stuff for those of us who can't make it...

Would be greatly appreciated...

cleve/wd5bor

From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996
From: meh@cbsms1.cb.att.com (m.e.hartwell)
Subject: [8613] Digest for May 15th
Message-ID: <199605161228.IAA21020@emsr1.emsr.lucent.com>

Hello

Did anyone get a digest for May 14 th? I didn't get a digest yesterday and wonder if something happened or there just wasn't one. If there was a digest how do I get a copy, if it hadn't been for the one I read today I would have gone into the DT's.

Marty

From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996
From: "richard wilkerson" <richqrp@msn.com>
Subject: [8640] email address
Message-ID: <UPMAIL07.199605162207450171@msn.com>

Hello..Does anyone know the e-mail address of Roy Gregson W6EMT of the NW 8020 rig???Iam still having trouble with my 8040..
72's rich wd6fdd

From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996
From: "Phil Sikes" <psikes@whidbey.net>
Subject: [8609] Greetings from a newbie
Message-ID: <199605160625.XAA20463@islander.whidbey.net>

Hello all, I am rather new to QRP as well as ham radio (about 1 1/2 yrs licensed). This is a little ditty I thought you all might enjoy. Not really QRP, but I think you might find it humorous.

The CW Prayer

Our father who art in the ionosphere, Vibroplex be thy name. Yea though I listen to the folly of sideband, I will speak no evil. My bug and my paddle they comfort me. My straight key shall be my staff to ward off the evils of digital modes. SSTV shall never cross the threshold of this holy shrine (shack). My DSP is a comfort in the storms of the night. My dipole shall listen and my vertical glisten, but my Quad and my Yagi protect me from the vagaries of QRM. We give thanks for dual VFO's so when we hearest the word split we shall be able to listen up. May Bencher and Viking protect us in our chasing of DX. AMEN

....

CUL,
Phil
Amateur Radio Station
KJ7NS
email: psikes@whidbey.net

From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996
From: JerryK0DU@aol.com
Subject: [8647] K0DU's 5/8 Wave 30-Meter Vertical System Detail
Message-ID: <960516232445_492773961@emout09.mail.aol.com>

I have some requests to elaborate more on my vertical, so here is the complete scoop. I moved from a mountain top of approx. 9,000 ft. elevation where I had some rather nice antenna systems over the years, such as a 4-el quad with 2 full size elements on 40 meters and various mono and tri band yagis in excess of 100 ft. I moved from this location to be closer to my job and found myself north of Denver on the flatlands with 2.5 acres. Building a new home, I knew that it would be some time before I could spend much time with a tower and my antenna projects--you know, landscaping and other honey do's, hi hi! A very good ham friend that lives abt 7 miles south of my new location insisted that I put up a vertical or dipole to just get back on. I told Lloyd (WA0WOD) I would make an attempt and pick up a butternut vertical per his recommendation. We both decided that my 60 x 60 septic field would be the location of choice to mount this vertical. We rolled out a ton of 33 ft. pieces of chicken wire out from the base for a radial system and carefully stuck 16 6-ft ground rods down into the septic field which is always damp and soggy. Oh yeah, we soldered a piece of 12-gauge wire to each gnd rod and weaved this wire back through the chicken wire also soldering it together in many spots to form a 33 ft. wire mat around the base of the antenna. Lloyd also has a butternut vertical (also the short one) and also a 2 el 40 meter hy-gain beam at 80 ft. We made a lot of checks together and both verticals seem to work abt the same. Both, however, on DX were usually several db down to even an S unit or two below his 2 el 40 meter beam. Well, I played with the butternut for awhile and decided to build a 5/8 wave 41 ft. vertical for 20 meters. The butternut came down. The 41 ft. vertical went

up and played very well on 20 meters. I used a coaxial matching section described in the Practical Antenna Handbook by Joseph J. Carr in his section on 5/8 wave verticals, and it worked very well. I was now a good S unit or better than Lloyd's butternut on 20 meters. Well, I got tired of being stuck on 20, so I took my MFJ model number 962c and put it in an old ice chest at the base of the 41 ft. radiator fed thru the balanced line terminals on the back with one terminal to the radiator and the other to the gnd system. I have tried using the antenna tuner in the shack with different types of feed lines but have found that the tuner by far works the best at the base of the antenna. The only drawback is that I have to go outside to change bands. I suppose there are ways to build a remote matching network, but I have never made the effort. I took my MFJ 259 antenna analyzer and went thru the bands making a reference chart for all the band settings. All bands tuned flat as a pancake and to my surprise 40 meters was less than abt 1.7 to 1. across the band, but does it work? I called Lloyd and we got on 40 with the gang.

Everywhere we went I was kicking his butt, and I was now equal to his 40 meter beam. He thought I bought an amplifier. I went down on 40 CW and could not believe the difference. Lloyd came over and we played on 40 CW with amazement--knocking off everything we heard. We both sat there trying to analyze why this new funky vertical was doing so well--same coax, same location on septic. Why? We really don't know; it just works. We tried it on 75 meters and compared it to his butternut. Same results on dx--as much as 2 S units better. Well, we thought we would even make it better. Right?

Wrong. Well, sort of wrong. We extended the antenna to approx 84 ft., now making it a full 5/8 wave on 40. Nothing scientific abt our method of testing other than many, many checks with Lloyd, and we really didn't see any great improvements on 40 meters--DX or state side. 75 & 160 did improve, however, but not real drastic. 15, 17 and 20 meters went down the drain in performance. The radiator was just too long for these bands. We took the antenna down to abt 55 ft., which is approx 5/8 wave on 30 meters and have concluded that the vertical does extremely well on 15 thru 160 meters. 10 meters has never been played with, and I expect it is too long. I guess one could run a parallel wire insulated from the main radiator 5/8 wave for 10.

I have had many, many compliments from hams who have asked abt the antenna and have made many checks with commercial-made verticals in this area with ridiculous differences in my favor. We still don't have the answers but know that it works. It has made a believer out of me that verticals can work! My plans are to put up a 2 el spider Quad 10 thru 40 meters on my 89 ft. crank up. The vertical will remain. One other note: I have always been a stickler for a low swr, a good match, and believe it is essential while running QRP. I would like to see someone else build the same antenna to see if it works as well as mine. 73's. Jerry K0DU.

From owner-qrp-l@Lehigh.EDU Thu May 16 22:40:45 1996
From: Stan Skelton <sskelton@c1n.etc.bc.ca>

Subject: [8622] Micronaut kits

Message-ID: <Pine.3.89.9605160836.B27772-0100000@sparky>

I've ordered a Micronaut (msm-k) surface mount miniature 80 meter tx (microwatt output) today, but am starting to get the jitters about constructing an "itty-bitty" rig....anyone out there done any microminiature surface mount stuff?...any words of sage advice before I start sharpening up the ol iron?

TtFn....Stan T.M. VE7 SKT QRP-L #34

From owner-qrp-l@Lehigh.EDU Thu May 16 22:40:45 1996

From: "Jim Markle" <jim_markle@corp.disney.com>

Subject: [8644] My Portable Sta...very long.....

Message-ID: <9604168322.AA832293652@ccunix1.disney.com>

Ahh, backpacking. Nothing like it!

I love backpacking. And in my opinion, adding a qrp station just about makes backpacking adventures perfect.

Here's what works for me. Keep it simple. And simple doesn't mean you have to make any real sacrifices. Just make a few adjustments.

First, leave the tuner at home. You're already carrying wire so just add a little more and make a multi-band dipole. You're not likely to use more than 3 bands on a "typical" trip so don't come prepared to operate 10-160. Think about where you're going and what might be good bands/propagation for that area. Decide on maybe 3 bands. I carry an HW8 and a dipole for 40 and 20. I common-feed both dipoles to the same center connection and string them up in the trees in a configuration that looks something like a bow tie. Very broad banded, works very well on both bands and only has one feedline. You can do a lot with even your 120' piece of wire. And find some 20-22ga or even smaller wire. I've even used 28ga magnet wire with very good results. Use the tuner at home to set things up and leave it. Unless you're pulling REAL hard and stretching the wire when you string it up in the trees, swr will not be a problem.

I use a 50' piece of Radio Shack RG58 coax. Not real small like the 213 stuff or whatever but it works very well and it's cheap. And if I leave it on a mountain top (which I have before....) no big deal. And it will withstand stepping on, bending, stretching, etc.

Find a tiny key. I got one several years ago from South Africa. It was supposedly South African Army surplus, brand new in the box and is about 1"x1"x2". I recently saw an ad somewhere that they are still available. Anyway, pretty small. Gotta have a key so find or make a small one.

Turn off all non-critical rig panel lights and use a candle. You'll have candles anyway.

Don't carry much more than a 4-6AH gel cell. If your rig is setup properly you will have more than enough for several days of excellent hf time. And when you've gone through that gelcell, it's probably time to go wander around in the woods with your significant other anyway! Or if you're by yourself, it's time to go smell the flowers.....whatever.

Print out a QRP-L list with calls and names. It's so much fun to make a contact out in the wilderness and be able to quickly look them up on the list. Really adds a neat "fun factor".

Even if you copy in your head, make extra notes on that one special contact of the trip. You'll have one. And save those notes. I'm not exactly a "diary" kind of person. But you'll always have at least one cw contact that stands out as really special. And you should make a point to jot down a few notes for later.

Good grief, I've rambled on and on. Well hey, I could go on and on about portable hf operating. But I won't. Just a few ideas on how I like to have fun. Hopefully something in my ramblings has given you some ideas to improve on and maybe enjoy your next trip a little more.

After thinking about all this I want to go RIGHT NOW!!!!!!

later, jm
KB50B Van Nuys

----- Reply Separator -----

Subject: Portable Stations
Author: saswel@unx.sas.com at CORP-INTERNET-BURBANK
From owner-qrp-l@Lehigh.EDU Thu May 16 22:40:45 1996
From: Bob Patten <n4bp@bcfreenet.seflin.lib.fl.us>
Subject: [8610] N4BP/C6A to be active for 50Mhz Sprint & HF on 5-18-96
Message-ID: <Pine.3.89.9605160250.A3347-01000000@bcfreenet.seflin.lib.fl.us>

W40VU, WA4FLZ, and I will head for Bimini this weekend to participate in the ARRL VHF 6 Meter Sprint CONTEST. We will be running 100 watts to a 2 el quad and expect to hit the air waves by about noon on Saturday. We

will be active through Sunday on both 6 Meters and HF. For HF, we will use a battery powered TS-130V running 5 watts to a trapped vertical and will be at or near the following QRP calling frequencies:

cw	ssb
==	===
7.040	
14.060	14.285
21.060	21.385
28.060	28.385

For VHF enthusiasts, our grid square will be FL05.
For IOTA enthusiasts, our IOTA Ref will be NA048.

If your hear N4BP/C6A, please give us a call!

73, BP

Bob Patten
n4bp@bcfreenet.seflin.lib.fl.us

From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996
From: "richard wilkerson" <richqrp@msn.com>
Subject: [8634] patches on 7040
Message-ID: <UPMAIL07.199605161814390825@msn.com>

Boy what a good Idea..let's run international phone patches on 7040kc.
No one will care..like these people never heard on the 7040 before??
I knew of this way before I knew anything about qrp..
72's rich wd6fdd

From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996
From: "Warren E. Lewis" <saswel@unx.sas.com>
Subject: [8638] Portable Stations
Message-ID: <199605162032.AA09745@cardamom.unx.sas.com>

Gang,

I figured I would get all the folks that are left here on list during Dayton for some opinions on Portable Stations.

My current portable set up is an Argo 509, MFJ-941E tuner, 6 or 8 Amp/Hr battery, 120ft of 18 AWG wire, and a cheap straight key. As you can see this is more of a lugable setup

than a lightweight, hike 4-5 miles over rough terrain type of setup. It is also a bit on the bulky side. I guess I could get a smaller tuner, but, I feel the SWR Meter is very important. I guess I could also build a Wilderness Sierra. That would certainly reduce the weight and power requirements.

What other things would you guys suggest to reduce the weight and size of this setup?

cheers - Warren

AD4ZE TMPS 1996 Qs=011 States=08 Confirmed=02 DX=01 MM=01
MA AL MS FL IN IL TX NY

--

Warren E. Lewis	saswel@unx.sas.com
Technical Support Division	(919) 677-8001 x6542
SAS Institute Inc.	PP-ASEL
Cary, NC	AD4ZE QRP-L#78 DOD#0021

From owner-qrp-l@Lehigh.EDU Thu May 16 22:40:45 1996
From: James Bell <jim.bell@canada.cdev.com>
Subject: [8619] RE; VERTICAL GROUND SYSTEMS
Message-ID: <199605161450.KAA47728@nss2.CC.Lehigh.EDU>

My understanding now (from what has been said) of a counterpoise is that it is a resonant length. The radial on the other hand, being buried with maybe chicken wire does not have to be resonant. As a kid I remember helping someone tune a counterpoise by snipping its length inch by inch. Because it was close to the ground, capacitance to ground probably affected its length. Hence the tuning. The length of 1/4 wavelength created high voltage at the end requiring that it be insulated. The end of the counterpoise (back then) had a large metal disk on it. I don't know what for. We don't install disks on radials. The counterpoise with its metal disk would be moved to different points of the compass to direct signals in that direction.

72 JIM VE3DDY

From owner-qrp-l@Lehigh.EDU Thu May 16 22:40:45 1996
From: lhalliday@creo.bc.ca
Subject: [8642] Re[2]: Micronaut kits
Message-ID: <9604168322.AA832284861@mail.creo.bc.ca>

Other than the obvious (use the right soldering iron, and Don't Panic!), if you've never done it before, try etching a pc board into some little islands and practice with some cheap (i.e. expendable) components. You can often buy oddball SMD parts at prices cheap enough to blow them up. Stock up on .1 and .001 uF chip capacitors - practice on some, and bypass everything in sight with the ones you have left over. As I mentioned on this list not that long ago, 1206 and 0805 size capacitors fit very nicely between the traces on the underside of pc boards.

Standard practice is to tin one pad, position the device, hold it down, reflow the solder on that pad, let it cool, and then solder the other pads. I like to use a long fingernail instead of a toothpick, freeing up an extra finger, and giving immediate thermal feedback (OUCH!) if I overdo it.

Really, though, I've always found SMD components to very rugged, very tough, and very nearly indestructible. Your mileage may vary, of course...

Laura Halliday VE7LDH	"C'est une femme mutine, assez
lhalliday@creo.bc.ca	elegante, grave et legere, ayant le
ve7ldh@amsat.org	sens du confort et du plaisir
Locator: CN89mg	en tout." - C. Deneuve

From owner-qrp-l@Lehigh.EDU Thu May 16 22:40:45 1996
From: Roy Boggs <rboggs@pcc-uky.campus.mci.net>
Subject: [8643] SLT #240 Rec'd
Message-ID: <2.2.32.19960516224646.006867e0@pcc-uky.campus.mci.net>

To those waiting for St Louis Tuners, I rec'd mine today (No. 240). Haven't checked contents but was professionally boxed and shipped.

Roy Boggs KE4KDT ARCI QRP-L Norcal ARRL

From owner-qrp-l@Lehigh.EDU Thu May 16 22:40:45 1996
From: lve1@inel.gov (Larry V East)
Subject: [8617] St. Louis Tuner - do you have yours?

Message-ID: <2.2.16.19960516143916.13e7470e@eloi>

Has anyone above #200 on the list received their kit yet? I'm around 205 (I think) and haven't received mine yet. I sent a note to Doug asking about shipment status, but nothing heard; guess he is busy or something.

Wanta get that sucker built in time for field day!

72, Larry W1HUE/7

From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996
From: PaulKB8N@aol.com
Subject: [8641] Tuning Caps
Message-ID: <960516181037_115115727@emout19.mail.aol.com>

In a message dated 96-05-15 20:20:07 EDT, you write:

Gang,

I was able to locate 12 NEW variable capacitors. These have 4 sections (max of 205, 22, 89, and 22pf) which can be paralleled for approximately 340pf, great for many antenna tuner designs. These have an 1/8" reduction drive inside a 1/4" shaft. If you don't have any 1/8" knobs or don't want to use the reduction drive feature, you can cut off that portion of the shaft. The caps are the "small frame" style broadcast variables, which are really getting impossible to find (size is 1.25 x 1.5 x 2.25 ").

For those of you who have projects that might use these, I'll ship them to you for \$4.50 each. Please limit your order to your needs, my motivation in doing this is to help as much of the community as possible to obtain needed parts.

Thanks, Paul

From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996
From: Dave Fifield <fifield@lan.nsc.com>
Subject: [8624] Vertical using support pole?
Message-ID: <319B6A09.7438@lan.nsc.com>

Hmmm, all this vertical talk has me wondering.

I have a sloping 40m dipole fed with 450 Ohm ladder line as my main HF antenna at the moment. The center is suspended out from a 25 ft. pole which also happens to have a J-pole on the top of it for 2m/70cm. The J-pole is electrically connected to the top of the main pole and at the moment, the whole pole arrangement is grounded.

Could I un-ground the pole, add some roof mounted radials, tune the pole at the bottom and feed the whole arrangement as a vertical? What would I need to tune it - a remote tuner so that it can be made to go on various bands? Would the V/UHF coax feeding the J-Pole on the top be a problem? If so, I could remove it to another stack of antennas at the other end of the house. Also, would the 40m sloping dipole be a problem?

Hints/tips would be welcome.....I am willing to experiment!

Dave Fifield

```
|--      KQ6FR      --|
--||      QRP-L  #92      ||--
|--      Norcal #1486      --|
```

From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996
From: Mill.Moore@VALLEY.NET (Mill Moore)
Subject: [8616] W6TOY addr needed
Message-ID: <1053230@hanover.VALLEY.NET>

Can someone give me the e-mail address for Bruce, W6TOY?

Mill, AA1PB
Hartland, Vermont

From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996
From: svecbrdk@well.com (Lillian Svec and Wayne Burdick)
Subject: [8608] Wilderness Radio Dayton special pricing
Message-ID: <v0151010badc07939c8f1@[206.15.66.101]>

Folks, Bob Dyer at Wilderness asked me to relay the following message.

While you're at Dayton, stop by the usual QRP hot spots and grab a Wilderness order form with a show-special stamp. A 10% discount applies to all orders using this form that are received by May 31st, 1996. Limit one discounted order per person. Some examples of what the discounted prices

are:

KC1	\$ 40.50
NorCal 40A	116.10
Sierra (basic kit)	193.50
Sierra w/6 band modules	332.10

I meant to post this earlier. Please relay the message to those who've already left. :)

73,
Wayne
N6KR

From owner-qrp-l@Lehigh.EDU Thu May 16 22:40:45 1996
From: Roy Boggs <rboggs@pcc-uky.campus.mci.net>
Subject: [8621] WTB - small keyer
Message-ID: <2.2.32.19960516151215.006818ac@pcc-uky.campus.mci.net>

Guys,

Do any of you equipment junkies have a good, small, keyer for sale? I'm sure that everybody has replaced their Super CMOS III's and Codeboy's with the KC-1 by now!! The smaller the better (for camping), and memories not necessary.

Roy Boggs KE4KDT ARCI QRP-L Norcal ARRL

From owner-qrp-l@Lehigh.EDU Thu May 16 22:40:45 1996
From: James Bell <jim.bell@canada.cdev.com>
Subject: [8637] Re 49er Mods
Message-ID: <199605161933.PAA121095@nss2.CC.Lehigh.EDU>

NORCAL have miles of mods for this beastie.
Try <http://www.fix.net/~jparker/norcal.html/>

From owner-qrp-l@Lehigh.EDU Thu May 16 22:40:45 1996

From: GREGOIRE@ENDOR.COM (ERNEST GREGOIRE)
Subject: [8623] Re: Greetings from a newbie
Message-ID: <199605161628.MAA76254@nss2.CC.Lehigh.EDU>

Answer to the prayer,

Dear God, please help this newbie with his drinking problem.
He is obviously drinking from the same well as Nils.

:)

Ernie
de AA1IK

>The CW Prayer

>

>

>Our father who art in the ionosphere,

>..... ..

>

>CUL,

>Phil

>Amateur Radio Station

>KJ7NS

>email: psikes@whidbey.net

>

>

>

de AA1IK N.E.-QRP-C. # 202 (Lead by example, It is better to)
 QRP-L member #95. (pull a string than it is to push it.)

Ernie Gregoire
RR 1 Box 221
Canaan, NH. 03741

New England QRP Club, information
available on request by sending me a
S.A.S.E. or via E-mail.

e-mail : GREGOIRE@ENDOR.COM
packet : AA1IK@WA1WOK.FN43FE.NH.USA

From owner-qrp-l@Lehigh.EDU Thu May 16 22:40:45 1996
From: torell@sicom.com (Kent Torell)
Subject: [8625] Re: Micronaut kits
Message-ID: <v02130500adc106aec9fd@[192.91.202.41]>

>I've ordered a Micronaut (msm-k) surface mount miniature 80 meter tx
>(microwatt output) today, but am starting to get the jitters about
>constructing an "itty-bitty" rig....anyone out there done any
>microminiature surface mount stuff?...any words of sage advice before I
>start sharpening up the ol iron?
>TtFn....Stan T.M. VE7 SKT QRP-L #34

Clean iron (wet sponge), flux (radio shack tube ok), lots of light,
tweezers and toothpicks. It helps to have a magnifier, but if you're
nearsighted, you can take off your glasses and just get close (don't burn
your nose...)

Watch for 'tombstoneing'; when you solder one side of a chip part, the
surface tension of the solder will make the part stand on end!

Kent Torell torell@sicom.com 602-483-2867 x40
SICOM 7585 E. Redfield, #202 Scottsdale, AZ 85260
AB70A Tmps 1996 Qs=006 States=05 Confirmed=00 DX=00
AZ CO HI KS OK

From owner-qrp-l@Lehigh.EDU Thu May 16 22:40:45 1996
From: bob.roach@sourcebbs.com (BOB ROACH)
Subject: [8632] RE: Micronaut kits
Message-ID: <8C0B321.00010385F5.uuout@sourcebbs.com>

SS>-I've ordered a Micronaut (msm-k) surface mount miniature 80 meter tx
SS>-(microwatt output) today, but am starting to get the jitters about
SS>-constructing an "itty-bitty" rig....anyone out there done any
SS>-microminiature surface mount stuff?...any words of sage advice before I
SS>-start sharpening up the ol iron?
SS>-TtFn....Stan T.M. VE7 SKT QRP-L #34

Hi Stan,

Number one rule is keep these guy over a large light colored (preferably
white) surface. If you drop one anywhere else it will crawl away and

you will never find it again. I have not built a project with these yet but have soldered a few for practice and the hardest thing is to keep them in place till one end is soldered.

I read somewhere that a guy was attaching them with Loctite or Crazy Glue and then soldering them. It sounded good but I wonder about the electrical characteristics of the the glue. With the traces so close together it wouldn't take much to alter the value of the circuit.

Please give us an update as you go along. Since this will probably be "the wave of the future" we better be teaching each other how to deal with it. I need to get into this while I can still see thae darn little things. :-)

73 de KE4QOK
Bob

* SLMR 2.1a * You can trust the government..Just ask an Indian.

This message originated from: ----- Selective Source BBS
----- Virginia Beach, Virginia
----- (804) 471 6776

From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996
From: lhalliday@creo.bc.ca
Subject: [8639] Re: Portable Stations
Message-ID: <9604168322.AA832283047@mail.creo.bc.ca>

On a slightly different note...

I got to thinking last weekend about something quick and dirty for Field Day - the local club will be running an exact carbon copy of last year's FD station (which is an exact duplicate of what they've done for the past 10 years or so), which doesn't interest me at all. I'll have also just gotten back from a business trip to Europe, which will limit what I can do.

Initially, I considered taking a 2m handheld and a small beam to the top of a local mountain. Just think: full emergency power, QRP *and* VHF bonuses, possibly a public location, and so on. How about, then, a backpack portable Field Day station? A gel cell, a couple of little HF QRP radios with some wire to throw in a tree, a 2m handheld and small beam for some VHF stuff, and a small dish and no-tune transverter for some even more interesting stuff. Even satellites might be possible

with such a setup. I could take it on the bus - or charge batteries while I ride a bike around! Natural power bonus, anybody?

To my mind, this is also much more in the spirit of emergency preparedness - a station that you can take anywhere, any time, and be on the air in seconds.

Hmmm...

Laura Halliday VE7LDH	"C'est une femme mutine, assez
lhalliday@creo.bc.ca	elegante, grave et legere, ayant le
ve7ldh@amsat.org	sens du confort et du plaisir
Locator: CN89mg	en tout." - C. Deneuve

From owner-qrp-l@Lehigh.EDU Thu May 16 22:40:45 1996
From: lve1@inel.gov (Larry V East)
Subject: [8636] Re: St. Louis Tuner
Message-ID: <2.2.16.19960516190413.13e7e6f2@eloi>

At 02:02 PM 5/16/96 -0400, Tom, WB2QDG wrote:

>

>One advantage of being down the list is that you can learn from the
>efforts of others...I've saved a few of the comments concerning
>buldingthe kit, which have been posted. Has anyone put together anything
>all-inclusive which can be used as an addendum to the instructions?

>

A summary of construction hints, etc. has been compiled by Bob Follet, WA7FCU and was posted on the list about two weeks ago. If you have a WWW browser, you can get a copy by clicking on the first entry in the NorCal home page -- <http://www.fix.net/norcal.html>

I is probably also available from the Lehigh FTP site; if all fails, you can dig thru the archives of around April 30.

72, Larry W1HUE/7

PS - Tom was #209 on the list and got his today, so maybe mine will make it to the Wilds of Idaho in the next day or two... :-)

From owner-qrp-l@Lehigh.EDU Thu May 16 22:40:45 1996
From: lve1@inel.gov (Larry V East)
Subject: [8627] Re: St. Louis Tuner - do you have yours?

Message-ID: <2.2.16.19960516165530.25b7dc80@eloi>

At 11:43 AM 5/16/96 -0500, you wrote:

>I think Doug is scheduled to be at the FDIM thing in Dayton that starts today.
>

Yep ... I finally realized that he would be in Dayton (duh!). Hopefully he got 'em all shipped before he left.

To QRP-L: I'd still like to know if anyone >200 on the list has received their kit yet.

72, Larry.

From owner-qrp-l@Lehigh.EDU Thu May 16 22:40:45 1996

From: JEVERHART@cayman.vf.mmc.com

Subject: [8630] Re: St. Louis Tuner - do you have yours?

Message-ID: <960516132855.2500b166@carib.vf.mmc.com>

Larry, you wrote:

>At 11:43 AM 5/16/96 -0500, you wrote:

>>I think Doug is scheduled to be at the FDIM thing in Dayton that starts today.
>>

>Yep ... I finally realized that he would be in Dayton (duh!). Hopefully he got 'em all shipped before he left.

>

>To QRP-L: I'd still like to know if anyone >200 on the list has received
>their kit yet.

>

>72, Larry.

Are you suffering from FDIM/Dayton envy? I am :-0.

Sure is quiet these days. My terminal hardly ever beeps. Guess that means I get more work done.

72/73,

Joe E., N2CX

From owner-qrp-l@Lehigh.EDU Thu May 16 22:40:45 1996

From: Thom <thom@li.net>
Subject: [8633] Re: St. Louis Tuner - do you have yours?
Message-ID: <Pine.SUN.3.91.960516135853.4398A-100000@linet01>

Hi,

I was assigned #209 and received my package in today's (Thurs. 5/16) mail it was postmarked May 13 so it took 3 days to each Long Island..not too bad.

Can't wait to back home and open it up.

One advantage of being down the list is that you can learn from the efforts of others...I've saved a few of the comments concerning building the kit, which have been posted. Has anyone put together anything all-inclusive which can be used as an addendum to the instructions?

Tom
WB2QDG
thom@li.net

On Thu, 16 May 1996, Larry V East wrote:

> Has anyone above #200 on the list received their kit yet? I'm around 205 (I
> think) and haven't received mine yet. I sent a note to Doug asking about
> shipment status, but nothing heard; guess he is busy or something.
>
> Wanta get that sucker built in time for field day!
>
> 72, Larry W1HUE/7
>
>
>

From owner-qrp-l@Lehigh.EDU Thu May 16 22:40:45 1996
From: Dick Slavens <aero@napanet.net>
Subject: [8646] Re: St. Louis Tuner - do you have yours?
Message-ID: <319BEC2D.638A@napanet.net>

Larry,

I received my kit yesterday, #255. Great packing job, no damage.

Dick WA6TMF Napa, CA

Larry V East wrote:

>

> Has anyone above #200 on the list received their kit yet? I'm around 205
(Isnip ...

From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996

From: bob.roach@sourcebbs.com (BOB ROACH)

Subject: [8628] Re: Tranciever Kit Info Pse

Message-ID: <8C0B306.00010385E7.uuout@sourcebbs.com>

Hello Everyone,

I am getting ready to purchase a QRP tranciever kit and would like t
hear from folks who have purchased, built and used different kits so I
can get an idea of which is best suited to my needs.

If you have built and used a kit which is presently available drop me a
line and let me know what you liked and what you didn't like about it.

I plan to use this rig while camping as well as in the shack.

TNX de KE4QOK

Bob

* SLMR 2.1a * First rule of marriage, if you're right, apologize fast.

This message originated from: ----- Selective Source BBS
----- Virginia Beach, Virginia
----- (804) 471 6776

From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996

From: Allen Jones <ajones@adsnet.com>

Subject: [8631] Re: Tranciever Kit Info Pse

Message-ID: <199605161737.MAA15657@alice.adsnet.com>

At 12:54 PM 5/16/96 -0500, you wrote:

>Hello Everyone,

>

>I am getting ready to purchase a QRP tranciever kit and would like t
>hear from folks who have purchased, built and used different kits so I
>can get an idea of which is best suited to my needs.

Bob . . . The June issue of QST has a review of 7 different QRP transceiver kits starting on page 45.

72/3 de Allen, K9DZE

=====
Allen Jones K9DZE ajones@adsnet.com
Michigan City, Indiana EN61nq
ARCI G-QRP NorCal QRP-L #112
=====

From owner-qrp-l@Lehigh.EDU Thu May 16 22:40:45 1996
From: James Bell <jim.bell@canada.cdev.com>
Subject: [8611] RE:VERTICAL GROUND SYSTEMS
Message-ID: <199605161218.IAA78685@nss2.CC.Lehigh.EDU>

As I understand, when the 1 st vertical was designed, the designer took a vertical dipole and bent it into an L-shape.

It didn't catch on with early radio users until he added 3 more legs to the horizontal section.

Now I have some questions.

What is the technical difference between a radial and a counterpoise?

Why must the end of a counterpoise be isolated from ground?

If you use insulated buried radials, are they really acting as a counterpoise?

Thanks to all Jim

From owner-qrp-l@Lehigh.EDU Thu May 16 22:40:45 1996
From: Pat Taber <ptaber@logicraft.com>
Subject: [8612] Re: VERTICAL GROUND SYSTEMS
Message-ID: <199605161226.IAA37994@nss2.CC.Lehigh.EDU>

At 12:26 PM 5/15/96 -0600, you wrote:

><snip>

>

>>

>> LENGTH FIELD
>> OF INTENSITY
>> RADIALS IMPROVEMENT

>> -----

```
>>      0.125      REF
>>      0.25       2.1 dB
>>      0.375      2.5 dB
>>
>
><snip>
>
>Does this imply longer is better?
```

<yet another snip>

Well in quantum mechanical terms I suppose any lengthening is "better" but in economic/blowing-away-a-free-weekend terms what the number show is, taking 80 meters as an example, if you go from 10 meter long radials to 20 meter long radials you get about 2dB gain (way less than half an S-unit) while going from 20 meter radials to 30 meter radials you pick up 4-tenths of a dB (probably not audible.)

Now remember we're talking about adding 10 meters (about 33 feet) of wire *per radial*, so no, I don't think it says longer is better. I think it's saying there's an optimal length beyond which returns diminish to the point of being worthless.

I recall reading somewhere that electrically a vertical has a "ghost vertical" the same height as the vertical itself but extending into the ground under it. The ideal radiation pattern looks like an onion around the vertical and its ghost. But a ground mounted vertical only has half the onion above the ground. The point of radials is to provide a low-resistance return path from where the onion hits the ground back to the ghost. An elevated vertical utilizes shorter radials because more of the onion is above the ground.

I don't know how closely the above follows the truth, the article I read was more scholarly and there was no mention of onions or ghosts or ghost onions or whatever. But it helps visualize what's going on.

>>>==>PStJTT

```
=====
Patrick Taber (KC1TD)      Email: ptaber@logiccraft.com
Principal Software Engineer
Logiccraft Information Services
22 Cotton Road
Nashua N.H. 03063
```

From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996
From: Pat Taber <ptaber@logiccraft.com>
Subject: [8614] RE:VERTICAL GROUND SYSTEMS
Message-ID: <199605161255.IAA89594@nss2.CC.Lehigh.EDU>

> What is the technical difference between a radial and a
>counterpoise?

As I understand it (which means I'm probably wrong) a radial is a low-resistance return to the antenna. (See my previous reply about the onion...) The radial has to go out to the edge of the onion to intercept the currents that need to return. (By the way, they will return without the help of the radials, but travelling through the ground is work and work doesn't come free. That's where the signal strength suffers -- the energy is being used to complete the circuit rather than radiate.)

Radials cut for the lowest operating frequency will work for all others. That is, as you go up in frequency, the onion's radius (quarter-wavelength) gets smaller, but the onion always intersects the radials and the currents have a low-resistance return.

My (probably flawed) understanding of counterpoise is that a counterpoise is a kind of electrical joke -- a taking advantage of a loophole in the Grand Scheme of Things. It depends on the characteristics resonance. You have a piece of wire that looks like a plain old piece of wire under most circumstances, but when it just happens to be resonant looks like a dead short for that particular frequency. A counterpoise doesn't have to intercept the onion. It can be rolled up and tucked away somewhere and still do its job of routing currents of a particular frequency into a dead short. That's why I think of it as the electrical equivalent of a parlor trick.

The down-side is that, because it depends on resonance, like a resonant antenna the further you go from the design frequency the less effective it is. However, like a resonant antenna, you can add tuners to fix it up. You can also build a physically short counterpoise by using capacitance and inductance, just like antennas. In fact, maybe it's fair to say that a counterpoise is a kind of antenna being used to siphon off signals of a particular frequency. I dunno.

>>>==>PStJTT

=====
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From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996
From: weinfurtner@ouvaxa.cats.ohiou.edu (Greg Weinfurtner)
Subject: [8615] RE:VERTICAL GROUND SYSTEMS
Message-ID: <v01510100adc0a3e72422@[132.235.72.11]>

>> What is the technical difference between a radial and a
>>counterpoise?
>

Al Christman wrote an article for QST comparing the performance of
a 4 wire counterpoise above ground (10') and a radial field, on 80 meters.
I believe that the conclusion was that the counterpoise was capable of
just as low of an angle of radiation or better than the radial field it was
compared to. It was in the 80's or early 90's QST, so I'm not sure of the
results exactly...(Read: "I FORGET!")

That article is worth a read. Especially if you have the resources
to install an elevated counterpoise.

Al worked at OU for a while, I think he is in Penn at a small
college now.

73 de

```
*****
*                                     Greg Weinfurtner AEE BSS *
*      NN      N      SSSSSSS      8888888      0000000      Electronic Design Splst *
*      N N      N      S           8      8      0      0      Ohio University  Athens *
*      N N      N      SSSSSSS      8888888      0      0      GO BOBCATS!           *
*      N      N N           S      8      8      0      0                               *
*      N      NN      SSSSSSS      8888888      0000000                               *
*                                     Can thou send forth lightnings *
*                                     Amateur Radio      that they may go and say unto *
*                                     thee, 'Here we are'? Job 38:35 *
*      weinfurtner@ouvaxa.cats.ohiou.edu *
*      http://ouvaxa.cats.ohiou.edu/~weinfurtner *
*****
```


From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996
From: ddonald@vikings.onecomm.com (Dave Donaldson)
Subject: [8618] Re: VERTICAL GROUND SYSTEMS

> From: Pat Taber <ptaber@logicraft.com>
X-Cc: qrp-1@Lehigh.EDU
The ideal radiation pattern looks like an onion around the
> vertical and its ghost.

I am sorry but I cannot help my self. I have tried but.....

If the radiation pattern is an onion and the antenna gets hit by lighting
does that mean we now have "fried onions"?

Again I am sorry but I just cannot get it out of my mind

:>)

Going back to sleep.....

Dave, WB7DRU

From owner-qrp-1@Lehigh.EDU Thu May 16 22:40:45 1996
From: Pat Taber <ptaber@logicraft.com>
Subject: [8626] RE:VERTICAL GROUND SYSTEMS
Message-ID: <199605161647.MAA93533@nss2.CC.Lehigh.EDU>

>>short for that particular frequency. A counterpoise doesn't have to
>>intercept the onion. It can be rolled up and tucked away somewhere and still
>>do its job of routing currents of a particular frequency into a dead short.
>>That's why I think of it as the electrical equivalent of a parlor trick.

>>

>Whoops, you were doing pretty good up to here.

>You don't want the counterpoise to do any radiating -

>a low impedance to the feedline. Yup, you got that right.

> But how does this hunk-of-wire manage to generate

>this desired low impedance? One way is to use the quarter-wave

>trick. A 1/4 wave hunk-of-wire with a high impedance on one

>end presents a nice low impedance at the other.

>

>If you roll it up, it'll turn into an inductor. An inductor

>discourages currents, and presents a HIGH impedance. Very

>undesirable. Should be relatively straight, and away from

>other stuff.

>

Oh well, I got more right than I thought I would.... ;-) I probably should stop eating from aluminum pots, but I have this none-too-clear memory of someone at a ham club meeting passing around a large lump of rolled up coax and saying it was the counterpoise used on their multi-multi operation with the clear implication that it was used in the taped-up (rather than rolled out flat) configuration. I probably misunderstood.

>>>==>PStJTT

=====
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